

67. (New) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 66, wherein the *flbA* gene is able to hybridize, under conditions of stringency, with a probe corresponding to a nucleotide fragment from *H. pylori*, which has been amplified using two oligonucleotides having the following sequences:

OLF1bA-1: ATGCC<u>TCGA</u>GG<u>TCGA</u>AA<u>AG</u>CA<u>AG</u>ATG (SEQ ID NO:1),
OLF1bA-2: <u>GA</u>AA<u>TC</u>TTCAT<u>ACTG</u>GC<u>AGCT</u>CC<u>AG</u>TC (SEQ ID NO:2).

- 68. (New) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 66, wherein the *flbA* gene comprises SEQ ID NO: 6.
- 69. (New) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 66, wherein the *H. pylori* bacterial strain does not express the hook protein (or anchoring protein) of the flagellum of *H. pylori*.
- 70. (New) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 66, wherein the *H. pylori* bacterial strain also lacks the flagellum sheath.
- 71. (New) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 70, wherein the *H. pylori* bacterial strain does not express the hook protein (or anchoring protein) of the flagellum of *H. pylori*.

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- 72. (New) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 66, wherein the *H. pylori* bacterial strain is obtained from strain N6 having deposit Accession No. NCIMB 40512.
- 73. (New) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 66, wherein the *H. pylori* bacterial strain is strain N6flbA having deposit Accession No. NCIMB 40747.
- 74. (New) The extract of an *H. pylori* bacterial strain according to claim 66, wherein the bacterial extract is a total bacterial extract.
- 75. (New) The extract of an *H. pylori* bacterial strain according to claim 66, wherein the bacterial extract is a n-octyl glucoside extract.
- 76. (New) The extract of an *H. pylori* bacterial strain according to claim 66, wherein the bacterial extract is obtained after extracting with PBS or glycine.
- 77. (New) An *H. pylori* bacterial strain, or an extract of an *H. pylori* bacterial strain, wherein the *H. pylori* bacterial strain has an aflagellate phenotype resulting from a mutation in the *flbA* gene of the *H. pylori* bacterial strain, and wherein the *H. pylori* bacterial strain does not express the FlaA and FlaB proteins.

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78. (New) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 77, wherein the *flbA* gene is able to hybridize, under conditions of stringency, with a probe corresponding to a nucleotide fragment from *H. pylori*, which has been amplified using two oligonucleotides having the following sequences:

OLF1bA-1: ATGCC<u>TCGA</u>GG<u>TCGA</u>AA<u>AG</u>CA<u>AG</u>ATG (SEQ ID NO:1),
OLF1bA-2: <u>GA</u>AA<u>TC</u>TTCAT<u>ACTG</u>GC<u>AGCT</u>CC<u>AG</u>TC (SEQ ID NO:2).

79. (New) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 77, wherein the *flbA* gene comprises SEQ ID NO: 6.

- 80. (New) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 77, wherein the *H. pylori* bacterial strain does not express the hook protein (or anchoring protein) of the flagellum of *H. pylori*.
- 81. (New) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 77, wherein the *H. pylori* bacterial strain also lacks the flagellum sheath.
- 82. (New) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 81, wherein the *H. pylori* bacterial strain does not express the hook protein (or anchoring protein) of the flagellum of *H. pylori*.

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- 83. (New) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 77, wherein the *H. pylori* bacterial strain is obtained from strain N6 having deposit Accession No. NCIMB 40512.
- 84. (New) The *H. pylori* bacterial strain, or extract of an *H. pylori* bacterial strain, according to claim 77, wherein the *H. pylori* bacterial strain is strain N6flbA having deposit Accession No. NCIMB 40747.
- 85. (New) The extract of an *H. pylori* bacterial strain according to claim 77, wherein the bacterial extract is a total bacterial extract.
- 86. (New) The extract of an *H. pylori* bacterial strain according to claim 77, wherein the bacterial extract is a n-octyl glucoside extract.
- 87. (New) The extract of an *H. pylori* bacterial strain according to claim 77, wherein the bacterial extract is obtained after extracting with PBS or glycine.

REMARKS

With entry or this amendment claims 66-87 are pending in this application.

Support for the new claims is found throughout the specification; particular nonexhaustive examples of support for the added claims can be found at the locations indicated in the following table. Thus, the new claims are supported by the specification, no new matter enters by amendment, and entry of this amendment is proper.

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